AMENDMENTS TO THE CLAIMS INCLUDING STATUS OF ALL CLAIMS:

Please amend Claims 17-21 and add new Claims 34-40 as follows:

Claim 1. - Claim 16. (Cancelled)

17. (Currently Amended) An integrated controller comprising a machine controller, sensory electronics and a user-interface, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, said sensory electronics acquiring sensory data regarding the status of a formed part relative to the mold of the part-forming machine, and outputting said sensory data to said computer via said data interface; and

a program implemented independent from input provided by said user-interface, said program ~~for~~ analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; ~~and~~

~~means for displaying information, said display means in communication with said computer~~,

wherein said sensory electronics is at least one vision sensor, wherein said sensory electronics functionally communicates with said data interface of said computer, ~~and~~ wherein the injection-molding machine is functionally communicatable with said data

interface of said computer, and wherein said functional communications occur independently of input from said user-interface.

18. (Currently Amended) An integrated controller comprising a machine controller, sensory electronics and a user-interface, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, said sensory electronics acquiring sensory data regarding the status of a formed part relative to the mold of the part-forming machine, and outputting said sensory to said computer via said data interface;

a program initiated independent from input provided by said user-interface, said program ~~for~~ analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; and

means for displaying information, said display means in communication with said computer,

wherein said sensory electronics is at least one infrared sensor, wherein said sensory electronics functionally communicates with said data interface of said computer, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

19. (Currently Amended) An integrated controller comprising a machine controller, sensory electronics and a user-interface, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, said sensory electronics acquiring sensory data regarding the status of a formed part relative to the mold of the part-forming machine, and outputting said sensory to said computer via said data interface;

a program implemented independent from input provided by said user-interface, said program ~~for~~ analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; and

means for displaying information, said display means in communication with said computer,

wherein said sensory electronics is at least one air pressure sensor, wherein said sensory electronics functionally communicates with said data interface of said computer, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

20. (Currently Amended) An integrated controller comprising a machine controller~~,~~ and sensory electronics ~~and a user-interface~~, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, said sensory electronics acquiring sensory data regarding the status of a formed part relative to the mold of the part-forming machine, and outputting said sensory to said computer via said data interface;

a program implemented independent from input provided by said user-interface, said program ~~for~~ analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; and

means for displaying information, said display means in communication with said computer,

wherein said sensory electronics is at least one vacuum sensor, wherein said sensory electronics functionally communicates with said data interface of said computer, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

21. (Currently Amended) An integrated controller comprising a machine controller~~,~~ and sensory electronics ~~and a user-interface~~, for use with a part-forming machine, comprising:

a computer having a data interface;

sensory electronics in communication with said data interface of said computer, sensory electronics in communication with said data interface of said computer, said sensory electronics acquiring sensory data regarding the presence or absence of a formed part

within the mold of the part-forming machine, and outputting said sensory to said computer via said data interface; and

a program implemented independent from input provided by said user-interface, said program ~~for~~ analyzing said sensory data from said sensory electronics and controlling the part-forming machine and said sensory electronics in response to said sensory data; ~~and~~

~~means for displaying information, said display means in communication with said computer,~~

wherein said sensory electronics is at least one ultrasonic sensor, wherein said sensory electronics functionally communicates with said data interface of said computer, and wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

Claim 22. - Claim 33. (Cancelled)

Claim 34. (New) A quality control inspection station, comprising a machine controller and sensory electronics, for use with a part-forming machine, comprising:

a computer having a data interface, said sensory electronics in functional communication with said data interface of said computer, said sensory electronics inspecting the formed part, acquiring sensory inspection data regarding the formed part, and outputting said sensory inspection data to said computer via said data interface; and

a program for analyzing said sensory inspection data from said sensory electronics and for controlling the part-forming machine and said sensory electronics in response to said sensory inspection data,

wherein the injection-molding machine is functionally communicatable with said data interface of said computer.

Claim 35. (New) The quality control inspection station of Claim 34, wherein said sensory inspection data is acquired on the parting line surface of the mold of the part-forming machine.

Claim 36. (New) The quality control inspection station of Claim 34, wherein said sensory inspection data generated from said inspection of the formed part is measurement data.

Claim 37. (New) The quality control inspection station of Claim 34, wherein said sensory inspection data generated from said inspection of the formed part is characterization data, said characterization data enabling sorting of the formed parts.

Claim 38. (New) The quality control inspection station of Claim 34, wherein said program for analyzing said sensory inspection data from said sensory electronics and for controlling the part-forming machine and said sensory electronics in response to said sensory

inspection data performs said analysis and control operations before the part-forming machine begins a new molding cycle.

Claim 39. (New) The quality control inspection station of Claim 34, wherein said program for analyzing said sensory inspection data from said sensory electronics and for controlling the part-forming machine and said sensory electronics in response to said sensory inspection data performs said analysis and control operations in parallel with a new part-forming machine cycle.

D1 Claim 40. (New) A quality control inspection station, comprising a machine controller and sensory electronics, for use with a part-forming machine, comprising:

a computer having a data interface, said sensory electronics in functional communication with said data interface of said computer, said sensory electronics inspecting the formed part, acquiring sensory inspection data regarding the formed part, and outputting said sensory inspection data to said computer via said data interface;

a robotic member, said robotic member in functional communication with said data interface of said computer, wherein the formed part is removed from the mold via said robotic member, and wherein said robotic member positions the molded part for inspection by said sensory electronics; and

a program for analyzing said sensory inspection data from said sensory electronics and for controlling the part-forming machine, said sensory electronics, and said robotic member in response to said sensory inspection data,

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wherein the injection-molding machine is functionally communicatable with said data interface of said computer.